



**SONOCO**  
**INSTITUTE**  
CLEMSON® UNIVERSITY

## Introduction to Flexography Workshop

Location: Harris A Smith Room 101 and PrintCon

---

### Day 1

- 8:30**      **Program Overview and Introductions**
- 9:00**      **Presentation: Overview of Major Printing Processes**  
Litho, Gravure, Screen, Digital, Letterpress and Flexo: Compare and Contrast
- 10:00**     **Presentation: Inks, Anilox and Doctor Blades**  
Ink types and properties, role of the anilox, anilox specifications, and doctor blade configurations
- 11:00**     **Hands-On: Print Banded Anilox**  
Plate mounting, ink preparation, anilox selection and pressmanship.
- 12:00      Lunch
- 1:00**      **Presentation: Image Reproduction**  
File construction, halftone theory, image terminology
- 1:45**      **Presentation: Density and Tone Value**  
Learn how density and tone value are measured.
- 2:00**      **Hands-On: Evaluation of Banded Test**  
Measure effect of LPI and anilox volume on color strength and dot gain.
- 3:15      Break
- 3:30**      **Demo/Hands-On/Presentation: Technical Prepress for Flexo**  
Prepare 2-color design files for printing.
- 4:00**      **Demo: RIP and Output**  
Setup master file for plate output. Discuss RIP parameters.

---

## Day 2

AM activities will be at 500 Lebanon Rd. We will meet at 7:30am at the Harris building to carpool to the PrintCon building

- 8:00**      **Presentation: Intro to Corrugated**  
Corrugated substrates, mounting, and converting
- 9:00**      **Hands-On: 2-Color Press Run on Bobst Corrugated Press Setup**  
Set-up procedures, ink preparation, proof review
- 9:45**      **Hands-On: 2-Color Press Run on Bobst Corrugated Press Run**  
Color measurement, pH and Viscosity adjustments, on press troubleshooting
- 11:30**     **Head back to Sonoco Institute**
- 12:00      Lunch
- 1:00**      **Presentation: Flexographic Platemaking**  
Various workflows for making a flexographic printing plate
- 2:00**      **Hands ON: 4-Color design and prepress**  
Design, RIP, get plates started.
- 3:30**      **Presentation: Color Measurement and Comparison**  
Measuring and defining color with Lab, comparing color with Delta E.
- 4:00**      **Hands-On: Color Measurement and Comparison**  
Measure and compare color with a spectrophotometer.
- 4:45**      **Presentation: Press Optimization and Characterization**  
Creating optimized print conditions and conducting a press characterization.
- 5:30      End of Day

---

## Day 3

- 10:00**     **Hands-On: Pressroom Cleaning and Maintenance**  
Proper techniques for plate and anilox cleaning and storage.
- 8:00**      **Hands-On: Platemaking and Mounting**  
Finish plates and mount to sleeves.
- 9:00**      **Hands-On: 4-Color Process Press Run on OMET**  
Print CMYK job on press, color control for process printing.
- 11:00**     **Hands-On: Flexo Print Defects**  
Examine and discuss common print defects.
- 11:45**     **Recap and Questions**
- 12:00      End of Workshop